

IMPROVED SYSTEM FOR INDIVIDUAL AND
REMOTE CONTROL OF SPACED LIGHTING FIXTURES

5 ABSTRACT OF THE DISCLOSURE

 A plurality of spaced ceiling mounted fixtures
or other controllable electrical appliances have
radiation detectors mounted within each fixture and wired
internally of the fixture to a dimming circuit or to a
10 ballast. The radiation detectors have sensitivity over a
wide angle and have elongated plastic radiation
conduction rods which extend to or beyond the plane of
the lens of the fixture to be located free of shadow
effects of reflections of the fixture lens. A flexible
15 end light fiber optics can be used in place of the
acrylic rods. A narrow beam radiation transmitter
selectively illuminates one of the rods or end light
fiber optics without illuminating the others. The
dimming circuits or ballasts within the fixtures can be
20 further controlled by external dimmers, occupancy
sensors, timeclocks, photosensors and other types of
input devices. The radiation detector and ballast can
occupy a common housing and share the same power supply
and circuit board. The microcontroller for the radiation
25 detector operates with a 4 of 4 voting mode until a valid
signal is detected to switch the system to a 3 of 4
voting mode. A novel mounting adaptor for mounting a
visible light fiber optic cable is disclosed with the
visible light fiber optic cable conducting infrared
30 radiation for up to 24 inches.